

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116 – EXPEDITED PROCEDURE

Page 9
Dkt. 303 678US4

Serial Number. 09/942393

Filing Date: August 30, 2001

Title: STRUCTURE AND METHOD FOR DUAL GATE OXIDE THICKNESSES

REMARKS

Applicant has carefully reviewed and considered the Office Action mailed on February 3, 2003, and the references cited therewith.

Claims 41-55, 58-60, 62, and 64-66 are amended, no claims are canceled, and no claims are added; as a result, claims 41-77 remain pending in this application.

Form 1499

Applicant notes that the Hideo reference as originally submitted by Applicant and listed on the top of sheet 2 of the form 1499 was not initialed as having been considered by the Examiner. Applicant respectfully requests that the Examiner review the Hideo reference and return an initialed form 1499 in the next communication.

§103 Rejection of the Claims

Claims 41-44, 47-51, 55-59, and 62-66 were rejected under 35 USC § 103(a) as being unpatentable over Okazawa (U.S.4,700,212) in various combinations with Lowrey et al. (U.S. 5,057,449), Cavins et al. (U.S. 5,731,238), Hasegawa (U.S. 6,091,109), and Liu et al. (U.S. 5,257,095).

The pending office actions states that:

In response to Applicant's contention Lowrey reference failed to teach a dielectric layer having a first thickness including a top layer which exhibits a high resistance to oxidation at high temperatures. Examiner agrees with Applicant but

as shown in col. 3, lines 49-52). In response to Applicant's contention Okazawa reference failed to teach the step of forming a dielectric layer having a first thickness including a top layer which exhibits a high resistance to oxidation at high temperature, but as shown in the Office action, Okazawa discloses this limitation which recited in col. 5, lines 37-42.

As noted by the Examiner, Lowery does not teach a dielectric layer having a first thickness including a top layer which exhibits a high resistance to oxidation at high temperatures.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116 - EXPEDITED PROCEDURE

Page 10
Dkt: 303.678US4

Serial Number: 09/943393

Filing Date: August 30, 2001

Title: STRUCTURE AND METHOD FOR DUAL GATE OXIDE THICKNESSES

Okazawa appears to show forming "a thin silicon oxide film 42 and a silicon nitride film 43" (col. 5, lines 37-38), however Okazawa goes on to show removing the silicon nitride film 43 and the silicon oxide film 42 and "newly" forming gate oxide films 29, 39 (col 5, lines 43-45). Applicant respectfully submits that Okazawa does not show a **gate dielectric** having a first thickness including a top layer which exhibits a high resistance to oxidation at high temperatures. Applicant respectfully submits that the temporary structures 42 and 43 are not gate dielectrics.

Neither Lowery nor Okazawa show **gate dielectrics** with a top layer which exhibits a high resistance to oxidation at high temperatures. Therefore Applicant respectfully submits that if combined, the Lowery and Okazawa references do not support a 35 USC § 103(a) rejection.

In contrast, Applicant's claim 41 includes a gate dielectric having a first thickness including a top layer which exhibits a high resistance to oxidation at high temperatures. Applicant's independent claims 47, 55, and 62 contain similar language to claim 41. Applicant reserves the right to further distinguish claims 47, 55, and 62 at a later date.

Applicant respectfully submits that the Cavins, Hasegawa, and Liu references fail to cure the deficiencies of Okazawa and Lowrey as discussed above.

Because the cited references, either alone or in combination, do not show every element of Applicant's independent claims, a 35 USC § 103(a) rejection is not supported by the references. Reconsideration and withdrawal of the rejection is respectfully requested with respect to Applicant's independent claims 41, 47, 55, and 62. Additionally, reconsideration and withdrawal of the rejection is respectfully requested with respect to the remaining claims that depend therefrom as depending on allowable base claims.

Allowable subject matter

Claims 67-77 were allowed. Applicant acknowledges and thanks the Examiner for allowance of these claims.

Claims 45-46, 52-54, and 60 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant acknowledges and thanks the Examiner for indication of allowability of claims 45-46, 52-54, and 60 if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116 – EXPEDITED PROCEDURE

Page 11
Dkt: 303.678US4

Serial Number: 09/943393

Filing Date: August 30, 2001

Title: STRUCTURE AND METHOD FOR DUAL GATE OXIDE THICKNESSES

Applicant has not amended claims 45-46, 52-54, and 60 to place them in independent form at this time. Pursuant to arguments presented above, Applicant respectfully submits that these claims are in condition for allowance as amended.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (612) 373-6944 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

KIE Y. AHN ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938

Minneapolis, MN 55402

(612) 373-6944

Date 7-3-03

By 
David C. Peterson
Reg. No. 47,857

I, the undersigned, hereby certifies that this correspondence is being deposited with the United States Postal Service as airmail on this 3rd day of April, 2003.

on this 3rd day of April, 2003

Amy Moriarty

Name

Amy Moriarty

Signature